A **65 year old male** was fatally injured when he was struck by a blind flange while trying to remove it from an inlet port of a vessel under pressure. The company fabricated pressure vessels for fuel filter housings mainly used in the aircraft fuel industry. At the time of the incident, a hydrostatic test for ASME certification had just been completed on four pressure vessels. The four vessels were tested successfully with a mixture of water and compressed air.

Based on the evidence, it was determined that the deceased began removing a 6" Victaulic blind prior to relieving the air pressure that was stored within the pressure vessel. The deceased had relieved the hydrostatic pressure from all four vessels and had forced the water out of all vessels with the use of the compressed air. The deceased had relieved the compressed air from 3 out of 4 of the vessels and begun disassembling the blinds and other port blockage devices on the vessels. The deceased utilized an air impact wrench to remove the bolts of the Victaulic blind. According to an employee working to assist him in the disassembling of the port blockage devices, the deceased had begun loosening the blind before a loud sound and pressure erupted in the area. Due to the high amount of air pressure within the tank, when one or two of the bolts holding the Victaulic blind in place were loosened the air pressure forced the cap from the port of the vessel under extremely high speeds which struck the deceased in the chest, knocking him about 8' across the floor resulting in internal injuries and ultimately his death.

Citation(s) as Originally Issued

A complete inspection was conducted at the accident scene. Some of the items cited may not directly relate to the fatality.

<u>Citation 1 Item 1</u> Type of Violation: Serious \$5400

TCA 50-3-105(1): The employer did not furnish employment and a place of employment which were free from recognized hazards that were causing or likely to cause death or serious physical harm to employees:

In that an employee was struck by a Victaulic blind during the process of removing it after failing to relieve air pressure from the vessel. The air

pressure was used to remove water from the vessel after a hydrostatic test was completed.

Among other methods, feasible and acceptable abatement methods to correct these hazards would be to use a pump to retrieve the water from the vessels and/or create procedures that identify the proper steps needed to ensure all air and/or water pressure has been released from vessels prior to the removal of any blinds, plugs, threaded caps or other means of blockage used in hydrostatic testing.

<u>Citation 1 Item 1</u> Type of Violation: Serious \$700

29 CFR 1910.151(b): There was neither an infirmary, clinic, nor hospital used for the treatment of all injured employees in near proximity to the workplace, nor a person or persons adequately trained to render first aid:

In that there was not a person or persons adequately trained to render first aid treatment to injured employees.

<u>Citation 2 Item 1a</u> Type of Violation: Other-than-Serious \$100

29 CFR 1910.1200(h)(1): Employees were not provided effective information and training on hazardous chemicals in their work area at the time of their initial assignment and whenever a new hazard that the employees had not been previously trained about was introduced into their work area:

In that one employee did not receive training on the hazards associated with the chemicals that they are exposed to during their daily work assignments, such as Metal Guard 810, Carbon Monoxide, and Irwin Chalk.

<u>Citation 2 Item 2b</u> Type of Violation: Other-than-Serious \$0

29 CFR 1910.1200(h)(3)(iv): Employee training did not include the details of the hazard communication program developed by the employer, including

an explanation of the labeling system and the material safety data sheet, and how employees can obtain and use the appropriate hazard information:

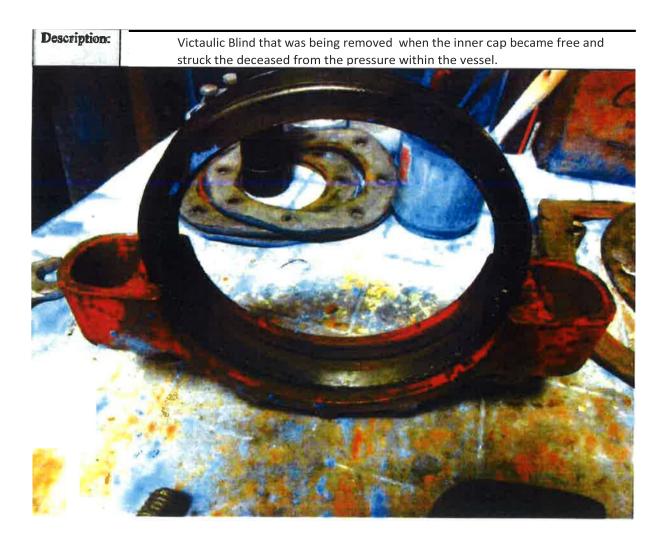
In employees were not able to identify the location of the safety data sheets.

<u>Citation 2 Item 1c</u> Type of Violation: Other-than-Serious \$0

TDLWD Rule 0800-01-09-.07: Employees were not provided annual refresher training and information as specified in TDLWD Rule 0800-01-09-.07 on hazardous chemicals in their work area:

In that employees that had been working longer than a year were not provided with refresher training of hazardous chemicals in the workplace.





Description: Center cap of 6" Victaulic Blind that was being removed when the cap became free and struck the deceased from the pressure within the vessel.

